FIG. 1

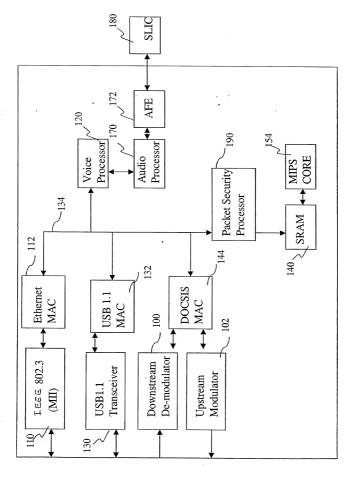
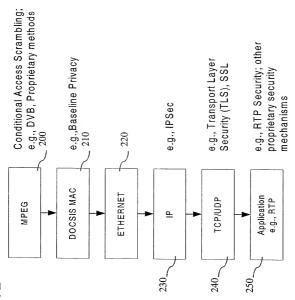
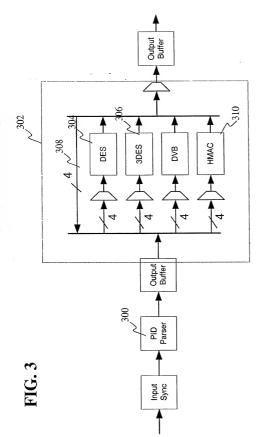


FIG.





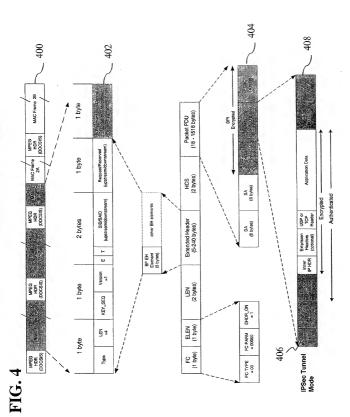
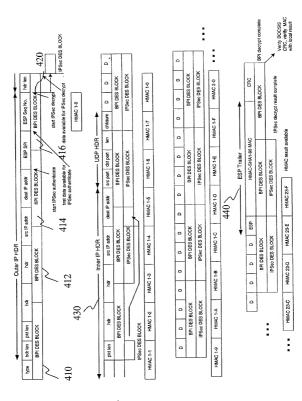
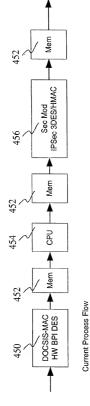


FIG. 5





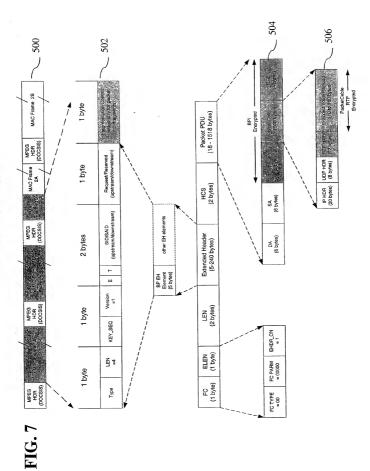
Converged Security Process Flow

Packet Sec Proc BPI DES IPSec 3DES/HMAC

DOCSIS

482

480



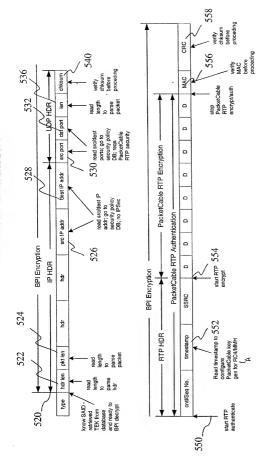


FIG. 8

NOP HOR	E	×
	chksu	BPI DES BLOCK
무	ual	BP1 DE
- UD	src port dst port I	
	src port	
1	dest IP addr	BPI DES BLOCK
	src IP addr	
- IP HDR -	hde	BPI DES BLOCK
	Þ	
	pkt len	PI DES BLOCK
1	hdr len pkt len	BPIDES
	type	

I	I														
cutt/St	cntl/Seq No.	\ dwestamb	88	SSRC	۵	٥	۵	٥	٥	۵	۵	۵	٥	۵	۵
		BPI DES BLOCK		L	# BPIDES	BPI DES BLOCK			BPI DE	BPI DES BLOCK			BPI DES BLOCK	BLOCK	
-			1	Ĺ	RTP dat	RTP data for auth			RTP dat	RTP data for auth			RTP data for auth	for auth	
91	1st HT	1st RTP data auth/decrypt	auth/decrypt						RTP data	RTP data for decrypt			RTP data for decrypt	or decrypt	
authenticate	authen timesta MAC)	avadable to authernicate (but no timestamp for MMH		start RTF	start RTP encrypt	1st RT	P data ava	1st RTP data available to decrypt	decrypt						

BPI DES BLOCK	BPI DES BLOCK	BM DES BLOCK	BPI DES BLOCK
RTP data for auth			
RTP data for decrypt			

BPI DES BLOCK RTP data for auth 0 0

۵

٥

۵

٥ ٥

> ٥ BPI DES BLOCK RTP data for auth

۵

Verity DOCSIS CRC		MAC result available	decrypt result complete	▲ Verrly MAC with local result
Ven		anth	dec	
CRC	BLOCK	RTP data for auth	RTP data for decrypt	
D MAC	BPI DES BLOCK	RTP data	TP data f	
۵				
٥				
۵	BLOCK	for auth	w decrypt	
۵	BPI DES BLOCK	RTP data for auth	RTP data for decrypt	
۵				
۵				
۵	BLOCK	for auth	or decrypt	
۵	BPI DES BLOCK	RTP data for auth	RTP data for decrypt	
۵			ľ	
۵		•		•

:

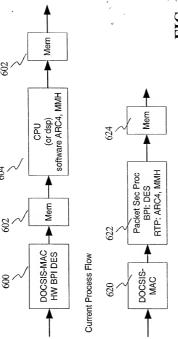
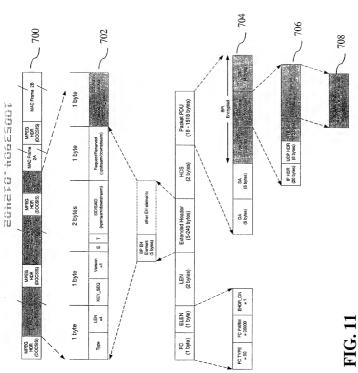


FIG. 10

Converged Security Process Flow



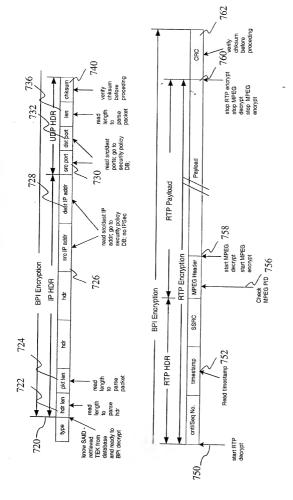


FIG. 12

1			_	
UDP HDB	chksim		NOO IS SELECT	PLOCA
E H	9		DDI DE	5
- UDP	dst port			
1	src port det port			
	dest IP addr		BP! DES B! OCK	
	src IP addr		_	_
IP HDR	hdr		BPI DES BLOCK	
	hdr		♣	
	pkt len	,,00	S BLOCK	
	hdr len p	020 000	BPI DES	
•	type			

					_		
		_		۵			-
				٥	BLOCK	RTP data for decrypt	MPEG data for decrypt
Tipo Name	BPI DES BLOCK			٥	BPI DES BLOCK	TP data f	PEG data
5	BPIDES			۵			Σ
5				٥			~
100 100				۵	BLOCK	RTP data for decrypt	MPEG PID available
	BPI DES BLOCK			a	BPI DES BLOCK	TP data f	
	BPI DE		1				
			■ MPEG HDR	MPEG Header			
			- MPEC	MPEG	BPI DES BLOCK	for decrypt	
	BPI DES BLOCK		1		BPI DE	RTP data for decrypt	
	BPI DE		1	SSRC			
				SS			Advisor
		ļ	HDH	timestamp	BPI DES BLOCK		1st RTP data available to decrypt/
	BPI DES BLOCK	- RTP HDR -			BPI DES		1st i avai
	BPIDE			cntl/Seq No.			
		,		cntl/S	_		start RTP encrypt
			•		_		9 9

				MPEG data for encrypt			
			MPEG data for decrypt	MPEG data for encrypt			
Venfy DOCSIS CRC		RTP data for decrypt	MPEG data for decrypt	MPEG data for encrypt			
CRC	BLOCK	RTP data for decrypt	MPEG data for decrypt	MPEG data for encrypt			
٥	BPI DES BLOCK	RTP data fi	PEG data fo			PEG data	
0			2	Σ			
۵							

FIG. 13